Type: LRTM/2

Asymmetrical Recycling / Delayed Pulse Timer

Terminal Protection to IP20



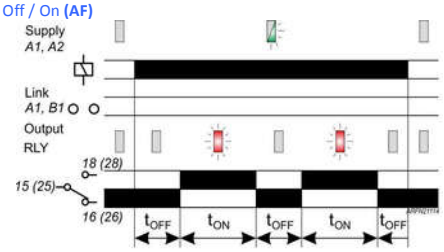
Dims: to DIN 43880
W. 17.5mm

- ***NEW*** **17.5mm DIN rail housing**
- **Microprocessor based**
- **Dual Function - Asymmetrical recycling "Off/On" AF or Delayed Pulse DP**
- **Separate adjustments for "on" and "off" ranges**
- **7 Selectable time ranges (0.1 seconds – 100 hours)**
- **Fine adjustment of selected time range**
- **Multi-voltage input (12 – 230V AC/DC)**
- **DPDT relay output 8A**
- **Green LED indication for supply / timing status**
- **Red LED indication for relay status**
- **Conforms to IEC 61812**

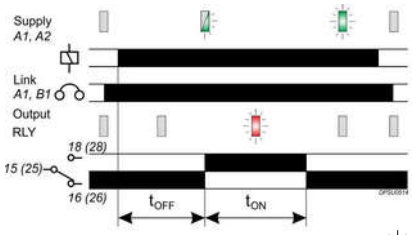
ISO 9001:2015
Cert. No. 14125771

FUNCTION DIAGRAMS

Asymmetrical Recycling Off / On **(AF)**



Delayed Pulse **(DP)**
(terminals A1 and B1 linked)





INSTALLATION AND SETTING

Installation work must be carried out by qualified personnel.

- BEFORE INSTALLATION, ISOLATE THE SUPPLY.
- Connect the unit as required.
- If the Delayed Pulse function is required, place a link between terminals A1 and B1.

Setting the unit.

- Set the "t_{OFF}" ❹ and "t_{ON}" ❻ "Range" selectors to the required position (depending on whether seconds, minutes or hours are required).
- Set the "Set %" adjustment for the "t_{OFF}" ❸ and "t_{ON}" ❺ as required. The "Set %" is a % of the selected range, so 60% of the 1 – 10 hour range will give 6 hours.

Applying power.

- Apply power and the green LED ❶ will start flashing to indicate timing is in progress.
- The red relay LED ❷ will illuminate to indicate the relay is the energised state when the "t_{ON}" delay is running.
- When the "t_{OFF}" delay is running and relay is de-energised, the red LED will remain extinguished.
- If the Delayed Pulse function is selected, the green LED will stop flashing and remain illuminated when the relay de-energises after the "t_{ON}" period.

Note:

[1] In accordance with IEC 61812, the green LED is permitted to extinguish during a voltage dip or momentary interruption of the power supply providing the state of the output relay does not change.

[2] The dip / interruption (reset) duration and levels are defined in the product standard however, the standard allows for these to be different from the levels actually specified.

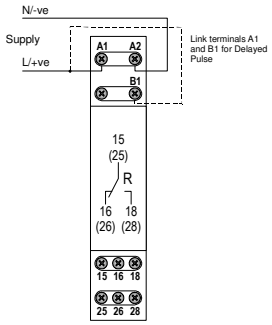
TECHNICAL SPECIFICATION

Supply voltage U **(A1, A2)**:	12 – 230V AC/DC			
Frequency range:	48 - 63Hz (AC supplies)			
Supply variation:	AC: +15/-10% DC: +/-15%			
Overvoltage category:	III (IEC 60664)			
Rated impulse withstand voltage:	4kV (1.2/50µS) IEC 60664			
Power consumption (max.):	12V	24V	110V	230V
AC:	0.6VA	0.8VA	2.6VA	6.8VA
DC:	0.52W	0.48W	0.94W	1.9W
Timing function:	Asymmetrical Recycling "Off / On" or Delayed Pulse *(A1 > B1 linked)*			
Timing ranges (7):	Seconds:	Minutes:	Hours:	
(applies to "t_{ON}" and "t_{OFF}")	0.1 – 1	0.1 – 1	0.1 – 1	
	1 – 10	1 – 10	1 – 10	
			10 - 100	
Reset time[2]:	<100mS			
Accuracy:	± 1% of maximum full scale			
Adjustment accuracy:	< 5% of maximum full scale			
Repeat accuracy:	± 0.5% at constant conditions (IEC 61812)			
Drift with temperature:	± 0.05% / °C			
Power on indication / Timing[1]:	Green LED			
Relay status:	Red LED			
Ambient temp:	-20 to +60°C			
Relative humidity:	+95%			
Output **(15, 16, 18 / 25, 26, 28)**:	DPDT relay			
Output rating:	AC1		250V 8A (2000VA)	
	AC15		250V 3A	
	DC1		25V 8A (200W)	
Electrical life:	≥ 150,000 ops at rated load			
Dielectric voltage:	2kV AC (rms) IEC 60947-1			
Rated impulse withstand voltage:	4kV (1.2/50µS) IEC 60664			
Housing:	Orange flame retardant UL94			
Weight:	≈ 80g			
Mounting option:	On to 35mm symmetric DIN rail to BS EN 60715 or direct surface mounting via 2 x M3.5 or 4BA screws using the black clips provided on the rear of the unit.			
Terminal conductor size	≤ 2 x 2.5mm² solid or stranded			
Approvals:	Conforms to IEC 61812.			

UL LISTED IND. CONT. EQ. E111187

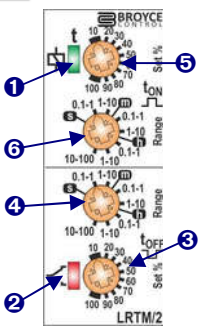
CE, C-tick and RoHS Compliant.
EMC: Immunity: EN 61000-6-2 (EN 61000-4-3 10V/m 80MHz - 2.7GHz)
Emissions: EN 61000-6-4

CONNECTION DIAGRAM

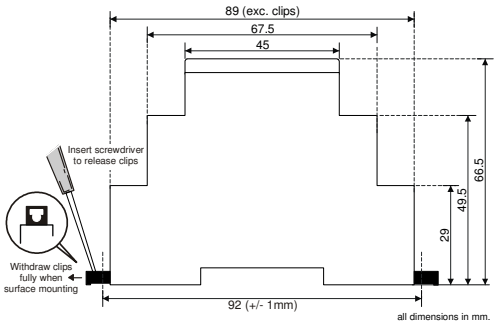


SETTING DETAILS

1. Power supply status / Timing (Green) LED
2. Relay output status (Red) LED
3. "t_{OFF}" delay "Set %" adjustment
4. "t_{OFF}" delay "Range" selector
5. "t_{ON}" delay "Set %" adjustment
6. "t_{ON}" delay "Range" selector



DIMENSIONS



Broyce Control Ltd., Pool Street, Wolverhampton, West Midlands WV2 4HN. England
Tel: +44 (0) 1902 773746 Fax: +44 (0) 1902 420639 Email: sales@broycecontrol.com Web: www.broycecontrol.com

The Information provided in this literature is believed to be accurate (subject to change without prior notice); however, use of such information shall be entirely at the user's own risk.